

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.

6,855,424 B1

Application No. 09/474,043

Issued:

February 15, 2005

Docket No. 13713

Patentee(s):

Thomas et al.

Title:

Breathable Composite Elastic Material Having a Cellular Elastomeric Film Layer

and Method of Making Same

## REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR USPTO'S MISTAKES UNDER 37 C.F.R. 1.322(a)

ATTN: CERTIFICATE OF CORRECTION BRANCH Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Certificate of Correction form, PTO-1050, suitable for printing, listing errors which appear in the Claims of the above-identified patent. The errors resulted from the mistake of the Patent and Trademark Office. The Commissioner is respectfully requested to certify and issue the Certificate of Correction in order to correct the errors.

As required by M.P.E.P. Subsection 1485, the errors are shown correctly in the application file in a First Response After Final Rejection – Amendments to the Claims mailed with a Request for Continued Examination on June 14, 2004. A photocopy of the document supporting the patentee's request is attached to expedite the process.

#### In the Amendment to the Claims:

Claim 35, line 4, "a sty nic moiety" should read --a styrenic moiety--;

Claim 36, line 2, "water low" should read --water, a low--;

Claim 46, line 1, "Be material" should read -- The material--;

Claim 47, line 2, "created there" should read --created therein--;

Claim 52, line 4, "therein crated" should read --therein created--;

Claim 56, line 3, "garment a panty" should read --garment, a panty--;

Claim 56, line 3, "a preparation shield" should read -- a perspiration shield--;

Claim 57, line 3, "vapor th through" should read --vapor therethrough--;

Claim 58, h), "said from step" should read --said foam of step--;

Claim 58, i), line1, "of a non-extendable" should read --of a non-extensible--;

Claim 58, i), line 4, "percent retractable" should read --percent being retractable--;

Claim 61, a), line 1, "Se of" should read --free of--;

Claim 61, c), line 1, "said polymer" should read --mixing said polymer--;

Claim 61, d), line 1, "mixture an extrusion" should read --mixture through an extrusion--;

Claim 61, d), line 2, "whereby apparatus" should read --whereby apertures--;

Claim 63, a), line 2, "created then by" should read --created therein by--;

Claim 63, a), line 3, "a pod" should read --a portion--.

### Please send the certificate to:

Nancy M. Klembus Kimberly-Clark Worldwide, Inc. 401 N. Lake Street Neenah, Wisconsin 54956

The above-identified patent has been assigned to Kimberly-Clark Worldwide, Inc. The Assignment was recorded at Reel 010505, Frame 0609 on December 28, 1999.

Respectfully submitted,

KIMBERLY-CLARK WORLDWIDE, INC.

Nancy M. Klembus

Registration No. 40,051

Telephone: 770-587-8612

#### UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

Page <u>1</u> of <u>1</u>

PATENT NO.:

6,855,424 B1

APPLICATION NO.: 09/474,043

ISSUE DATE:

February 15, 2005

INVENTOR(S):

Thomas et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 22, line 67, Claim 2, "a sty nic moiety" should read -- a styrenic moiety--;

Column 23, line 6, Claim 3, "water low" should read --water, a low--;

Column 23, line 35, Claim 10, "Be material" should read -- The material--;

Column 23, line 41, Claim 11, "created there" should read --created therein--;

Column 23, line 60, Claim 16, "therein crated" should read --therein created--;

Column 24, line 10, Claim 20, "garment a panty" should read --garment, a panty--;

Column 24, line 11, Claim 20, "a preparation shield" should read --a perspiration shield--;

Column 24, line 16, Claim 21, "vapor th through" should read --vapor therethrough--;

Column 24, line 54, Claim 22, "said from step" should read --said foam of step--;

Column 24, line 56, Claim 22, "of a non-extendable" should read --of a non-extensible--;

Column 24, line 60, Claim 22, "percent retractable" should read --percent being retractable--;

Column 25, line 6, Claim 25, "Se of" should read --free of--;

Column 25, line 9, Claim 25, "said polymer" should read --mixing said polymer--;

Column 25, line 11, Claim 25, "mixture an extrusion" should read --mixture through an extrusion--;

Column 25, line 12, Claim 25, "whereby apparatus" should read --whereby apertures--;

Column 26, line 6, Claim 27, "created then by" should read --created therein by--;

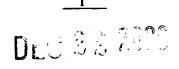
Column 26, line 6, Claim 27, "a pod" should read --a portion--.

MAILING ADDRESS OF SENDER:

Nancy M. Klembus Kimberly-Clark Worldwide, Inc. 401 North Lake Street Neenah, Wisconsin 54956

PATENT NO. <u>6,855,424 B1</u>

No. of add'l. copies @ 30¢ per page



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Continued Examination (RCE)

Address to:

Mail Stop RCE

Commissioner for Patents

Alexandria, VA 22313-1450

P.O. Box 1450

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Application Number	09/474/,043	
Filing Date	December 28, 1999	
First Named Inventor	Oomman P. Thomas	
Art Unit	1772	
xaminer Name	Watkins III, William P.	
Attorney Docket Number	141509.00000-P1141US00	

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.				
1. Submission required under 37 CFR 1.114 Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).				
a. Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.				
Consider the arguments in the Appeal Brief or Rely Brief previously filed on				
ff Other				
b. Enclosed				
I. Amendment/Reply iiI. Information Disclosure Statement (IDS)				
ii. Affidavit(s)/ Declaration(s) iv. Other				
2. Miscellaneous				
Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a				
a period of months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)  b Other				
3. Fees The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.				
The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 50-1429				
i. RCE fee required under 37 CFR 1.17(e)				
ii. Extension of time fee (37 CFR 1.136 and 1.17)				
iii. Other				
b. Check in the amount of \$enclosed				
c. Payment by credit card (Form PTO-2038 enclosed)				
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
SIGNATURE OF APPLICANT, ATTORNEY OR AGENT REQUIRED				
Name (PrintType) Jason A. Bernstein Registration No. (Attorney/Agent) 31.236 Signature Date Date				
CERTIFICATE OF MAILING OR TRANSMISSION				
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facelmile transmitted to the U.S. Patent and Trademark Office on the date shown below.				
Cince on the date shown opiow.				
Name (Print/Type)				

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiallty is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gethering, prepering, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Oomman P. Thomas et al.

Appl. No. 09/474,043

Filed:

December 28, 1999

For: BREATHABLE COMPOSITE ELASTIC MATERIAL HAVING A CELLULAR ELASTOMERIC FILM LAYER AND METHOD OF MAKING SAME

Confirmation No. 1780

Examiner: Watkins III, William P.

Art Unit: 1772

Attorney Docket No.: 141509.00000-P1141US00

Customer ID 25207

# FIRST RESPONSE AFTER FINAL REJECTION

Honorable Commissioner for Patents Mail Stop RCE P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Responsive to the Final Office Action mailed January 13, 2004, please amend the above-identified patent application as follows and consider the appended remarks:

- 1. Amendments to the Claims are reflected in the listing of claims which beings on page 2 of this paper.
- 2. Remarks/Arguments begin on page 12 of this paper.

The listing of claims will replace all prior versions and listings of claims in the application.

# Listing of Claims:

Please amend the claims as follows:

Claim 1 (Canceled) Claim 2 (Canceled) Claim 3 (Canceled) Claim 4 (Canceled) Claim 5 (Canceled) Claim 6 (Canceled) Claim 7 (Canceled) Claim 8 (Canceled) Claim 9 (Canceled) Claim 10 (Canceled) Claim 11 (Canceled) Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Canceled)
Claim 15 (Canceled)
Claim 16 (Canceled)
Claim 17 (Canceled)
Claim 18 (Canceled)
Claim 19 (Canceled)
Claim 20 (Canceled)
Claim 21 (Canceled)
Claim 22 (Canceled)
Claim 23 (Canceled)
Claim 24 (Canceled)
Claim 25 (Canceled)
Claim 26 (Canceled)
Claim 27 (Canceled)
Claim 28 (Canceled)
Claim 29 (Canceled)
Claim 30 (Canceled)

Claim 31 (Canceled)

## Claim 32 (Canceled)

- (Currently amended) A breathable cellular elastomer film or filament material having cells created therein by a cell opening agent, said material being essentially free of polystyrene homopolymer and having at least a portion of said cells being closed, said material being breathable and having an elongation at break of from about 300 to about 600 percent.
- 34. (Canceled) The breathable cellular elastomer film or filament material of Claim 33, wherein said material is a film material.
- 35. (Currently amended) The breathable cellular elastomer film or-filament material of Claim 33, wherein said film or-filament material comprises a material selected from the group consisting of a block copolymer having the general formula A-B-A' or A-B, where A and A' are each a thermoplastic polymer endblock which contains a styrenic moiety and where B is an elastomeric or rubber polymer midblock such as a conjugated diene or a lower alkene polymer elastomeric and a A-B-A-B tetrablock copolymer.
- 36. (Currently amended) The breathable cellular elastomer film or-filament material of Claim 33, wherein said cell opening agent is an azodicarbonamide, water, a low boiling point solvent, a fluorocarbon, a mixture of an isocyanate and a polyol or mixtures thereof.
- 37. (Currently amended) The breathable cellular elastomer film or filament material of Claim 33, further comprising at least one layer of an extensible material laminated to said filament material, said filament material having at least one aperture defined therein created by a cell opening agent.

- 38. (Currently amended) The breathable cellular elastomer film or filament material of Claim 37, wherein said cell opening agent is a material capable of forming openings in said film filament material.
- 39. (Currently amended) The breathable cellular elastomer film or filament material of Claim 37, wherein said cell opening agent is an azodicarbonamide, water, a low boiling point solvent, or the gas liberated by the reaction of a mixture of an isocyanate and a polyol with water.
- 40. (Currently amended) The breathable cellular elastomer film or filament material of Claim 37, wherein said cells are open to the filmsaid filament material surface, partially open or closed.
- (Currently amended) The breathable cellular clastomer film or filament material of Claim 37, wherein said composite material has an average water vapor transmission rate of from about 300 to about 20,000 g/m²/24 hours.
- 42. (Currently amended) The breathable cellular elastomer film or filament material of Claim 37. wherein said composite material has an average water vapor transmission rate as measured by the INDA (Association of the Nonwoven Fabrics Industry) test procedure IST-70.4-99 of from about 300 to about 20,000 g/m²/24 hours.
- 43. (Canceled) The film material of Claim 34, wherein said film material is formed by casting, extrusion or by mixing and dispensing to a moving belt methods.
- 44. (Canceled) The film material of Claim 34, wherein said cell opening agent is an azodicarbonamide, water, a low boiling point solvent, a fluorocarbon, a mixture of an isocyanate and a polyol or mixtures thereof.
- 45. (Canceled) The film material of Claim 34, wherein said cells are open to the film surface, partially open or closed.

- 46. (Currently amended) The material of Claim 3433, wherein said material has cells created therein by a cell opening agent, at least one of said cells being closed, said closed cells containing a solid, liquid or gas capable of timed release.
- 47. (Currently amended) The breathable cellular elastomer film or filament material of Claim 4633, wherein said material is a filament material having cells created therein by a cell opening agent, said filament material being at least partially air permeable, capable of transmitting water vapor therethrough and being elongatable.
- 48. (Currently amended) The breathable cellular elastomer film or filament material of Claim 46, wherein said solid, liquid or gas is released in response to an external stimulus.
- 49. (Currently amended) The breathable cellular elastomer film or filament material of Claim 48, wherein said external stimulus is increased temperature from a user.
- (Currently amended) The breathable cellular elastomer film or filament material of Claim 48, wherein said solid, liquid or gas is active.
- (Currently amended) The breathable cellular elastomer film or filament material of Claim 48, wherein said solid, liquid or gas is capable of inhibiting yeast filament formation.
- 52. (Currently amended) The breathable cellular elastomer film or filament material of Claim 33, further comprising at least one layer of an extensible material laminated to said elastomer material, said elastomer material having at least one aperture defined therein created by a cell opening agent.
- (Currently amended) The breathable cellular elastomer film or filament material of Claim 37, wherein said film filament material is formed by easting or extrusion methods.
- (Currently amended) The breathable cellular elastomer film filament material of Claim 3334, further comprising at least one layer comprised of an extensible material laminated

to said elastomeric film filament material to form a laminate, said elastomeric filament material film having apertures created therein by a cell opening agent, said laminate being formed into a personal care product.

- (Currently amended) The breathable cellular elastomer film or filament material of Claim 5554, wherein said laminate has an average water vapor transmission rate as measured by the INDA (Association of the Nonwoven Fabrics Industry) test procedure IST-70.4-99 of from about 300 to about 20,000 g/m²/24 hours.
- (Currently amended) The breathable cellular elastomer film or filament material of Claim 5554, wherein said laminate is formed into a bandage, a wound dressing, a diaper, an incontinence garment, a panty shield or liner, a perspiration shield a surgical gown or industrial workwear.
- 57. (Currently amended) A breathable cellular elastomer material having cells created therein by a cell opening agent, said material being at least partially air permeable, capable of transmitting water vapor therethrough and being elongatable, wherein said material is incorporated into a laminate material produced by a method, comprising:
  - a) providing a layer of a spunbond material;
  - b) providing a layer of an elastomeric film being essentially free of polystyrene homopolymer and having apertures formed therein by mixing a polymer material with a cell opening agent to form a mixture and extruding said mixture through a die such that apertures are formed therein, said apertures comprising cells, at least a portion of said cells being closed;
  - c) stretching said film of step b): and,
  - eld) laminating said stretched elastomeric film of step b) and said spunbond,

said breathable cellular elastomer material being breathable and having an elongation at break of from about 300 to about 600 percent and being retractable by at least 75% of said elongation.

- (Currently amended) A breathable cellular elastomer material having cells created therein by a cell opening agent, said material being essentially free of polystyrene homopolymer and at least partially air permeable, capable of transmitting water vapor therethrough and being elongatable, wherein said material is incorporated into a laminate material produced by a method, comprising:
  - a) providing an isocyanate material;
  - b) providing a polyol material;
  - c) providing a catalyst material;
  - d) providing an effective amount of water;
  - e) mixing said polyol material, catalyst material and water to form a mixture;
  - f) mixing the mixture of step e) with said isocyanate material to form a second mixture;
  - g) dispensing said second mixture through a die head onto a surface to form a cellular foam at least a portion of said foam having closed cells;
  - h) stretching said foam of step g) and,
  - hi) laminating said stretched foam of step h) to at least one layer of a non-extensible material so as to form a breathable elastomeric material,

said breathable cellular elastomer material being breathable and having an elongation at break of from about 300 to about 600 percent being retractable by at least 75% of said elongation.

59. (Previously presented) The material of Claim 58, further comprising curing said foam.

- 60. (Previously presented) The material of Claim 58, further comprising adjusting the polyol functionality to adjust the adhesive level desired.
- (Currently amended) A breathable cellular elastomer film or-filament material having cells created therein by a cell opening agent, said material being at least partially air permeable, capable of transmitting water vapor therethrough and being elongatable, wherein having apertures formed therein by a process, comprising:
  - a) providing an elastomeric polymer material essentially free of polystyrene homopolymer;
  - b) providing a cell opening material capable of releasing a gas;
  - c) mixing said polymer material and said cell opening material to form a mixture; and,
  - d) extruding said mixture through an extrusion die such that said cell opening material produces a gas whereby apertures are formed at least partially within the extruded material, at least a portion of said apertures being closed cells.
- 62. (Currently amended) A laminate material, comprising:
  - a layer of an elastomer film or filament material being essentially free of polystyrene homopolymer and having cells created therein by a cell opening agent, at least a portion of said cells being closed, said material being breathable and having an elongation at break of from about 300% to about 600%; and,
  - b) at least one layer of a spunbond material laminated to said elastomer film or filament material.
- 63. (Currently amended) A personal care article, comprising:
  - a layer of an elastomer film or—filament material being essentially free of polystyrene homopolymer and having cells created therein by a cell opening

agent, at least a portion of said cells being closed, said material being breathable and having an elongation at break of from about 300% to about 600%; and,

- b) at least one layer of a spunbond material laminated to said elastomer film or filament material.
- 64. (Currently amended) A stretchable top sheet for use in an article worn to manage fluids, comprising:
  - a) a layer of an elastomer film or filament material being essentially free of polystyrene homopolymer and having cells created therein by a cell opening agent, at least a portion of said cells being closed, said material being breathable and having an elongation at break of from about 300% to about 600%; and,
  - b) at least one layer of a spunbond material laminated to said elastomer film or filament material.